

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently amended): A plasma processing apparatus comprising:

a plasma processing chamber;

a susceptor installed within the plasma processing chamber ~~for mounting thereon a substrate to be processed, the susceptor being made of a conductive material;~~

an electrostatic chuck formed on the susceptor for mounting thereon a substrate to be processed;

a ring member directly disposed on the susceptor to surround a periphery of the substrate to be processed with a gap therebetween when the substrate to be processed is mounted on the electrostatic chuck; and

a lower ring body placed below the substrate to be processed and the ring member,
wherein when the substrate to be processed is mounted on the electrostatic chuck, the lower ring body is placed below the periphery of the substrate to be processed and an inner circumference of the ring member.

Claim 2 (Original): The apparatus of claim 1, wherein a ratio of an impedance per unit area of the ring member to that of the substrate to be processed is equal to or less than about 5.

Claim 3 (Original): The apparatus of claim 2, wherein the ratio of the impedance per unit area of the ring member to that of the substrate to be processed is equal to or less than about 3.

Claim 4 (Original): The apparatus of claim 3, wherein the ratio of the impedance per unit area of the ring member to that of the substrate to be processed is equal to or less than about 1.5.

Claim 5 (Original): The apparatus of claim 1, wherein the ring member is made of a material having an impedance substantially identical to that of the substrate to be processed and a thickness of the ring member is equal to or less than about five times a thickness of the substrate to be processed.

Claim 6 (Original): The apparatus of claim 1, wherein the ring member is made of the same material as that forming the substrate to be processed and a thickness of the ring member is equal to or less than about five times a thickness of the substrate to be processed.

Claim 7 (Original): The apparatus of claim 6, wherein the substrate to be processed is a semiconductor wafer made of silicon and having a thickness of about 0.8 mm and the ring member is made of silicon and has a thickness not greater than about 4 mm.

Claim 8 (Original): The apparatus of claim 6, wherein the substrate to be processed is a semiconductor wafer made of silicon and the ring member is made of silicon and has a thickness substantially identical to that of the semiconductor wafer.

Claim 9 (Original): The apparatus of claim 1, wherein the ring member is formed of SiC, aluminum having a thermally sprayed coating formed on a surface thereof, quartz or ceramics.

Claim 10 (Original): The apparatus of claim 1, wherein the susceptor includes a conductive lower electrode and the ring member is formed on a surface of the lower electrode by thermal spraying.

Claim 11 (Original): The apparatus of claim 1, wherein the lower ring body serves to protect the susceptor from a plasma generated within the plasma processing chamber.

Claim 12 (Currently Amended): A plasma processing apparatus comprising:
a plasma processing chamber;
a susceptor installed within the plasma processing chamber ~~for mounting thereon a substrate to be processed;~~
an electrostatic chuck formed on the susceptor for mounting thereon a substrate to be processed; and
a ring member disposed to surround a periphery of the substrate to be processed with a gap therebetween; ~~and,~~
wherein the ~~[[an]] electrostatic chuck formed on the susceptor to be~~ is located below the substrate to be processed and the ring member.

Claim 13 (Currently Amended): A plasma processing apparatus comprising:
a plasma processing chamber;
a susceptor installed within the plasma processing chamber ~~for mounting thereon a substrate to be processed;~~
an electrostatic chuck formed on the susceptor for mounting thereon a substrate to be processed; and

a ring member disposed to surround a periphery of the substrate to be processed with a gap therebetween,

wherein a ratio of an impedance per unit area of the ring member to that of the substrate to be processed is equal to or less than about 5.

Claim 14 (Currently Amended): A focus ring disposed on a susceptor to surround a periphery of a substrate to be processed, the susceptor being installed within a plasma processing chamber of a plasma processing apparatus and being made of a conductive material, the focus ring comprising:

a ring member directly disposed on the susceptor to surround the periphery of the substrate to be processed with a gap therebetween when the substrate to be processed is mounted on an electrostatic chuck; and

a lower ring body placed below the substrate to be processed and the ring member, wherein when the substrate to be processed is mounted on an electrostatic chuck, the lower ring body is placed below the periphery of the substrate to be processed and an inner circumference of the ring member.

Claim 15 (Original): The focus ring of claim 14, wherein a ratio of an impedance per unit area of the ring member to that of the substrate to be processed is equal to or less than about 5.

Claim 16 (Original): The focus ring of claim 14, wherein the ring member is made of a material having an impedance substantially identical to that of the substrate to be processed and a thickness of the ring member is equal to or less than about five times a thickness of the substrate to be processed.

Claim 17 (Original): The focus ring of claim 14, wherein the ring member is made of the same material as that forming the substrate to be processed and a thickness of the ring member is equal to or less than about five times a thickness of the substrate to be processed.

Claim 18 (Original): The focus ring of claim 14, wherein the ring member is formed of SiC, aluminum having a thermally sprayed coating formed on a surface thereof, quartz, or ceramics.

Claim 19 (Original): The focus ring of claim 14, wherein the ring member is formed at a surface of a conductive lower electrode by thermal spraying.

Claim 20 (Original): A focus ring disposed on a susceptor to surround a periphery of a substrate to be processed, the susceptor being installed within a plasma processing chamber of a plasma processing apparatus, the focus ring comprising:

a ring member disposed to surround the periphery of the substrate to be processed, wherein a ratio of an impedance per unit area of the ring member to that of the substrate to be processed is equal to or less than about 5.

Claim 21 (New): The apparatus of claim 12, wherein the entire upper surface of the susceptor is covered by the electrostatic chuck.